



## DT05 Rec'd PCT/PT0 0 5 SEP 2002 13 103 Docket No. SWA4338P0090US (WP/1801)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Y Alinetian of	) Autologous Marrow Stem Cell (MSC)	RECEIVED
In re Application of:	) Transplantation for Myocardial	JAN 0 2 2003
Ray C.J. Chiu et al.	) Regeneration	TECH CENTER 1600/2900
Serial No.: 10/089,710	) Group Art Unit: Not Known	IECH CENTER 1000/2003
Filed: April 1, 2002	) Examiner: Unassigned	RECEIVED
	TO THE PARCE OF THE STATEMENT	

INFORMATION DISCLOSURE STATEMENT

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Commissioner for Patents Washington, D.C. 20231

**TECH CENTER 1600/2900** 

Sir:

Applicants submit herewith patents, publications or other information of which they are aware which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. 1.56. While information provided in this Information Disclosure Statement may be "material" pursuant to 37 C.F.R. 1.56, the Information Disclosure Statement is not intended to constitute an admission that any patent, publication or other information referred to herein is "prior art" for this invention unless specifically designated as such. In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information exists, as defined in 37 C.F.R. 1.56.

## 37 CFR 1.8 CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service, as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on August 27, 2002.

Corinne Byk

Docket No. SWA4338P0090US (WP/1801)

A list of the patents and/or publications is set forth on the attached Form PTO-1449, and a copy of each of the items is supplied herewith.

This Information Disclosure Statement is not being submitted within three months of the filing date of the national application, but it is being filed before receipt of a First Office Action. Therefore, we believe no fee is due. If any additional fee might be required in connection with this matter, please charge our Deposit Account No. 23-0785.

Respectfully submitted,

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER

Date: August 27, 2002

Martin L. Katz, Reg. No. 25,011

Citicorp Center, Suite 3800 500 West Madison Street Chicago, IL 60661-2511 (312) 876-1800

	Robinson SW, Cho PW, Levitsky HI et al.: Arterial delivery of genetically labeled skeletal
\ \	myobalsts to the murine heart: Long-term survival and phenotypic modification of
	implanted myoblasts. Cell Transplantation 5:77-91, 1996
5.	Taylor, D.A.; Atkins B.Z., Hungspreugs P., et al.: Regenerating functional myocardium:
	Improved performance after skeletal myoblast transplantation. Nat. Med. 1998; 4:929-933
	Lichtman MD: The relationship of stromal cells to hemopoietic cells in marrow. In Long
	Term Bone Marrow Culture, pp. 57-96, DG Wright, JS Greenberger (eds), Alan R. Liss,
ข	New York, 1984
- ,	Caplan AI: The mesengenic process. Clinics Plast Surg 1994;21:429-435
	Friedenstein A.J. et al. in Exper. Hematol. 1976; 4:276
	Pereira R.F., Halford K., O'Hara M.D. et al.: Cultured adherent cells from marrow can
Į	
	serve as long-lasting precursor cells for bone, cartilage, and lung in irradiated mice. Proc.
	Natl. Acad. Sci. 1995; 92:4857-4861
	Horwitz EM, et al. Transplantability and therapeutic effects of bone marrow-derived
•	mesenchymal cells in children with osteogenesis imperfecta. Nature Medicine 5, 309-313,
	1999
,	Makino S. Fukuda K, Miyoshi S, et al.: Cardiomyocytes can be generated from marrow
*	stromal cells in vitro. J. Clin. Invest. 1999; 103:697-705
	Connold A.L., Frischknecht R, Dimitrakos M, Vrbova G. The survival of embryonic
4	cardiomyocytes transplanted into damaged host rat myocardium. J Muscle Res Cell Motil
U	1997;18:63-70
	Onifer SM, White LA, Whittemore SR, Holets VR. In vitro labeling strategies for
√	identifying primary neural tissue and a neuronal cell line after transplantation in the CNS.
	Cell Transplantation 1993;2:131-149
	Singer JW, Charbond P, Keating A, Nemunaitis J, Raugi G, Wight TN, et al. Simian virus-
$\checkmark$	40 transformed adherent cells from human long-term marrow cultures: Clone cells
	produced with "stromal" and hematopoietic characteristics. Blood 1987;70:464-474
	Shi BQ, Rafii S, Wu MHD, Wijelath ES, Yu C, Ishida A, et al. Evidence for circulating
J	bone marrow-derived endothelial cells. Blood 1998;92:362-367
	Wakitani S, Saito T, Caplan A.I. Myogenic cells derived from rat bone marrow
d	mesenchymal stem cells exposed to 5-azacytidine. Muscle & Nerve 1995;18:1417-1426
	Momparler RL, Laliberte J, Eliopoulos N, Beausejour C, Cournoyer D. Transfection of
*	murine fibroblast cells with human cytidine deaminase cDNA confers resistance to
	cytosine arabinoside. Anti-Cancer Drugs 1996;7:266-274
	Nagy JI, Li WE, Roy C, Doble BW, Gilchrist JS, Kardami E, Hertzberg EL. Selective
.4	monoclonal antibody recognition and cellular localization of an unphosphorylated form of
	connexin 43. Exp. Cell Res. 1997; 236:127 – 136
	Tomita S, et al. Autotransplanted mesenchymal stem cells improve function after a
	myocardial infarcation. Circulation 1998; 98(suppl 17):ABS1036
¥	Prockpo D. et al. Marrow stromal cells for nonhematopoietic tissues. Science 1997;
,30"	276:71-74
	Bruder SP et al. Mesenchymal stem cells in bone development, bone repair, and skeletal
	Bruder of et al. Meschenymai stem cens in bone development, bone repair, and skeretar
z.	•
sł.	regeneration therapy. Journal of Cellular Biochemistry 1994; 56(3):283-294  Ferrari G et al. Muscle regeneration by bone marrow-derived myogenic progenitors.
	1 d d

Kessler PD et al. Myoblast cell grafting into heart muscle: cellular biology and potential applications. Annual review of Physiology 1999; 61:219-242

Examiner

Date considered

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



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Form PTO-1449 (Rev.7-80)	U.S. Department of Commerce Patent & Trademark Office	ATTY.DOCKETT NO. SWA4338P0090US	SERIAL NO. 10/089,710	
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT Ray C.J. Chiu et al		
	(Coo Co (Co (Co (Co (Co (Co (Co (Co (Co	FILING DATE April 2, 2002	GROUP	

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date
	AA	5,486,359	Jan. 23, 1996	Caplan AI et al.			Feb. 8 1994
	AB	5,736,396	Apr. 7, 1998	Bruder et al.			Jan. 24, 1995
	AC						
	AD						
	AE						
	AF				RECE		
	AG				BILUE	VED	
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	AK				TECH CENTER	1600/2900	

FOREIGN PATENT DOCUMENTS

	Document number	Date	Country	Class	Subclass	Translation	
 AL	wo 99/03937	Jan. 28,1999	PCT			•	No
AM							
AN							
 AO							
AP							
AQ	NA -	W					,

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

<b>V</b>	L'enfant, C: Fixing the failing heart. Circulation 1997; 95:771-772
V.	Olivetti G, Abbi R, Quaini F, et al.: Apoptosis in the failing human heart. N Engl J Med 1997;336:1131-1141
ø	Chiu RC-J, Zibaitis A, Kao RL: Cellular cardiomyoplasty: Myocardial regeneration with satellite cell implantation. Ann Thorac Surg 1995; 60:12-18
✓	Soonpaa MH, Koh GY, Klug MG, et al.: Formation of nascent intercalated disks between grafted fetal cardiomyocytes and host myocardium. Science 1994; 264: 98-101
d	Klug M.G., Soonpaa M.H., Koh G.Y., Field L.J. Genetically selected cardiomyocytes from differentiating embryonic stem cells form stable intracardiac grafts. J. Clin. Invest. 1996; 98:216-24
1	Li RK, Jia ZQ, Weisel RD et al. Cardiomyocyte transplantation improves heart function.  Ann. Thor. Surg. 1996; 62:654-660